PayPal™

Website Payments Pro Hosted Solution Integration Guide

(Payflow Edition)

Last updated: December 2011

Website Payments Pro Hosted Solution Integration Guide

Document Number: 10112.en_GB-201112

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P Preface

About This Guide

The *Website Payments Pro Hosted Solution Integration Guide (Payflow Edition)* describes how to integrate with Hosted Solution. It includes information about:

- Features and benefits of Hosted Solution.
- Integrating your website with Hosted Solution.
- Customising your hosted payment page.
- Verifying the status and authenticity of the transactions before fulfilling the orders.

Intended Audience

This guide is for Website Payments Pro Payflow Edition (UK) merchants and developers that want to integrate with Hosted Solution to add transaction processing to their website.

Revision History

The following table lists the history of revisions made to the *Website Payments Pro Hosted Solution Integration Guide (Payflow Edition).*

TABLE P.1 Revision History for This Guide

Date Published	Description
August 2011	Created *Website Payments Pro Hosted Solution Integration Guide*

Documentation Feedback

Help us improve this guide by sending feedback to:

documentationfeedback@paypal.com

1 Getting Started with Website Payments Pro Hosted Solution

Overview

Hosted Solution is the fast and easy way to add transaction processing to your website. It is a secure, PayPal-hosted, web-based payment solution that allows you to securely send your buyers to PayPal's payment page to authorise and process transactions. Buyers pay with a debit or credit card, or their PayPal account and you do not have to capture or store credit card information on your website, thereby helping towards achieving PCI compliance.

Hosted Solution is the choice for merchants who prefer a solution where all financial details are handled by PayPal.

In addition to Hosted Solution, PayPal recommends that you implement the PayPal Express Checkout button on your website. The button appears much earlier in the payment flow and gives existing PayPal account holders the opportunity to use PayPal, thereby increasing the transaction completion rate.

Features and Benefits

Here are the features and benefits of Hosted Solution:

- **PCI compliance** - Payment Card Industry (PCI) Data Security Standards (DSS) is a global security standard which applies to all businesses that collect, store, process, or transmit card holder information. You can use PayPal's hosted payment page as part of the PCI compliance solution for your business.

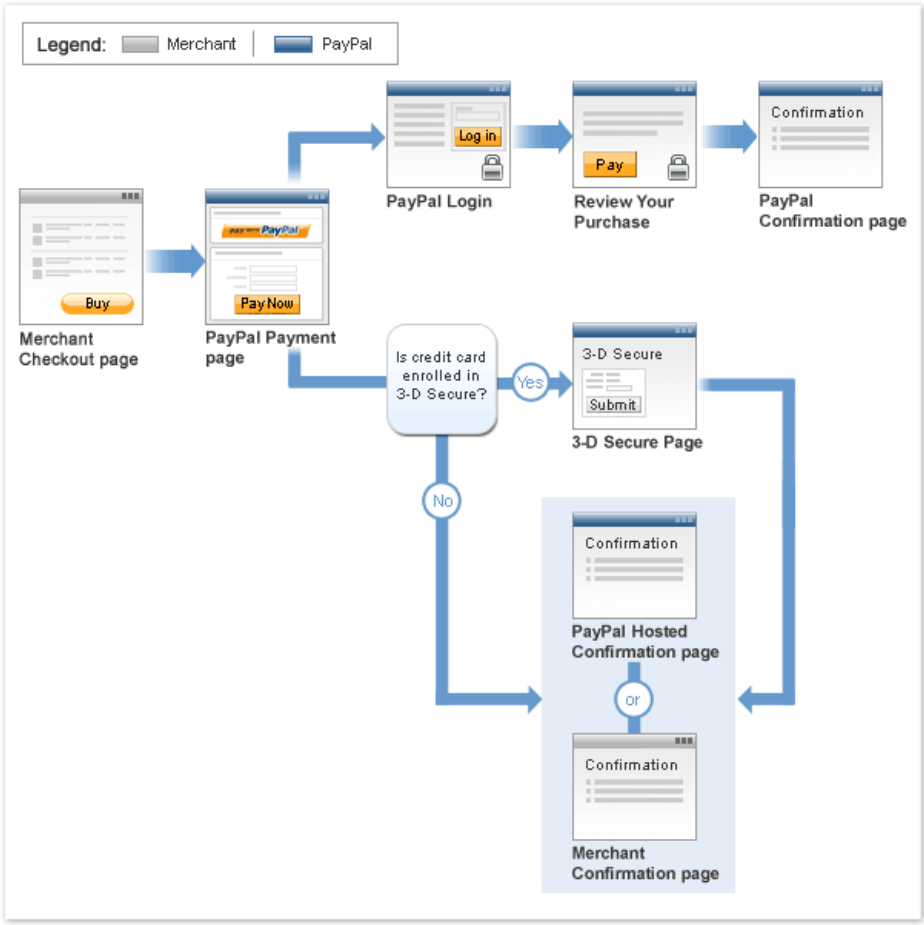
  NOTE: Hosted Solution implementation helps achieving PCI compliance, and does not necessarily guarantee it.

- **Supports iFrame** - PayPal offers a compact payment form that can be integrated in an iFrame on your website. The buyer completes the payment on your website and you can maintain the checkout look and feel in the master frame that surrounds the compact form.The credit card fields are part of the compact form so you do not have to collect this information separately. For more information, refer to Chapter 4, "Integrating iFrame in Your Website.

- **Support for 3-D Secure Buyer Authentication Protocol** - 3-D Secure can help to add an extra layer of fraud protection for online credit and debit card payments from your buyers. It can benefit your business by helping to reduce the number of unauthorised chargebacks you receive and the time it takes to resolve them. You can enable 3-D Secure via the PayPal-hosted payment page quickly, easily, and at no extra cost.

- **Virtual Terminal** - PayPal-hosted online payment form, which enables you to accept phone fax, mail orders for all major credit cards.
- **Supports Major Credit and Debit Cards** - Supports Visa, Visa Debit, Visa Electron, MasterCard, and Switch/Maestro.

How Hosted Solution Works



In the figure above, the top flow is for paying using your PayPal account and the bottom flow is for paying with a card.

To integrate your website with Hosted Solution:

1. Generate a button in your website checkout flow using HTML or API solution. The button could be labeled **Pay** or **Buy** or similar. When the buyer clicks this button, they are redirected to the payment page hosted by PayPal.
2. On the payment page, the buyer enters their debit or credit card information and clicks the **Pay Now** button. The buyer can also elect to use their PayPal account by clicking the **Pay with PayPal** button.
3. If the transaction is successful, the buyer either sees PayPal's confirmation page or is redirected to a URL you specify. If the transaction is unsuccessful, an error message is displayed, and the buyer can rectify the error and retry the transaction.

You can specify the content of the payment page and configure its appearance to reflect the look and feel of your website (including your logo).

Introduction to Integrating with Hosted Solution

After signing up for Hosted Solution, follow these steps to integrate your website with Hosted Solution:

1. Connect your website to Hosted Solution: Identify a point in your website checkout flow where you want to place a **Pay** or similar button that the buyer clicks on to initiate the payment. You can do this using HTML or API. Clicking on this button redirects the buyer's browser to PayPal's payment page for transaction processing. Depending on how you want to integrate, follow the steps described in Chapter 2, "Integrating Your Website Using HTML or Chapter 5, "Integrating Your Website Using API.
2. Optionally, customise the appearance and content of your PayPal-hosted payment page by either sending the appropriate HTTP variables or by editing your PayPal account settings. Refer to Chapter 3, "Customising Your PayPal Payment Page.

2 Integrating Your Website Using HTML

This chapter provides instructions for a simple integration that enables you to begin processing transactions using Hosted Solution.

NOTE: PayPal recommends that you implement the simple integration to familiarise yourself with Hosted Solution before implementing a more customised integration.

As part of a simple integration, you get the default settings on your payment page. To customise the look and feel of the page so it matches your website, you can do one of the following:

- Change your settings in your Profile section on PayPal.com, as described in "Modifying Your PayPal Account Settings" on page 17.
- Add the appropriate HTML variables to the payment page, as described in Table 2.1, "HTML Variables for Settings of Payment Page and Table 3.1, "HTML Variables for Look and Feel of Payment Page.

IMPORTANT: HTML variables will override the settings you save on your profile page.

Simple Hosted Solution Integration

To integrate your website with Hosted Solution, identify a point in your website checkout flow where you want to place a button that the buyer clicks to initiate the payment. The button should be labeled **Continue to Payment**, **Pay** or similar, and when clicked, should execute a Form POST to PayPal. Clicking on this button redirects the buyer's browser to the PayPal payment page where they can pay with debit or credit card, or their PayPal account.

The Form POST contains a set of HTML variables that describe the transaction and associate it with your Website Payments Pro account. In the Form POST, you must specify the following:

- `subtotal` OR `total` - amount of the transaction
- `partner` - the partner must be **PayPalUK**.
- `vendor` - Your merchant login ID that you created when you registered for the account.
- `paymentaction` - Indicates whether the transaction is for payment on a final sale or an authorisation for a final sale (to be captured later).

The default currency is USD. Additionally, you can specify the appropriate HTML variables listed in Table 2.1, “HTML Variables for Settings of Payment Page to customise the information collected on the payment page or Table 3.1, “HTML Variables for Look and Feel of Payment Page to customise the look and feel of the page. If the payment is successful, then the buyer either sees the PayPal confirmation page or is redirected to the URL you specify in your configuration.

The return URL is appended with a Transaction ID on the query string during the redirect back from the payment page to your website. This Transaction ID can be used to retrieve the status and verify the authenticity of the transaction. For detailed information on verifying the authenticity of the transaction before fulfilling the order, refer to Chapter 6, “Order Processing.

Sample Integration

Below is an example of a simple Hosted Solution integration:

1. Sample Hosted Solution Form POST:

```
<form action="https://securepayments.paypal.com/cgi-bin/acquiringweb"
method="post">
<input type="hidden" name="cmd" value="_hosted-payment">
<input type="hidden" name="total" value="50.00">
<input type="hidden" name="partner" value="PayPalUK">
<input type="hidden" name="vendor" value="vendorname">
<input type="hidden" name="paymentaction" value="sale">
<input type="hidden" name="return"
value="https://yourwebsite.com/receipt_page.html">
<input type="submit" name="PayButton" value="Pay">
</form>
```

   The bold text is the value for the corresponding variable. It is recommended that you enclose the values in quotes. For detailed information on these values, refer to Table 2.1, “HTML Variables for Settings of Payment Page.

2. Output the HTML text into your website at the point where buyers will proceed with their checkout.

3. Open your checkout page and test the button to ensure that it opens the PayPal payment page.

HTML Variables

The table below lists the Hosted Solution HTML variables you can use to send in additional transaction information along with your web request. For a list of HTML variables that you can use to customise the look and feel of your payment page, refer to Table 3.1, “HTML Variables for Look and Feel of Payment Page.

TABLE 2.1 HTML Variables for Settings of Payment Page

Variable	Description	Mandatory
address1	Street name of shipping address. (1 of 2 fields)	No
address2	Street name of shipping address. (2 of 2 fields)	No
address_override	The payer is shown the passed-in address but cannot edit it. This variable is overridden if there are errors in the address. The allowable values are true/false. Default is false.	No
billing_address1	Street name of the billing address. (1 of 2 fields)	No
billing_address2	Street name of the billing address. (2 of 2 fields)	No
billing_city	City name of the billing address.	No
billing_country	Country code of the billing address.	No
billing_first_name	First name of person the item is being billed to.	No
billing_last_name	Last name of person the item is being billed to.	No
billing_state	State name of the billing address.	No
billing_zip	Zip code of the billing address.	No
bn	Identifies the source that built the code for the button. **Format -** <Company>_<Service>_<Product>_<Country>	No
buyer_email	Email address of the buyer.	No
cancel_return	The browser will be redirected to this URL if the buyer clicks “Return to Merchant” link. Be sure to enter the complete URL, including http:// or https://.	No
cbt	Sets the text for the “Return to Merchant” link on the PayPal confirmation page. For business accounts, the return button displays your business name in the place of the word “Merchant” by default.	No
city	City name of shipping address.	No
country	Country name of shipping address.	No
currency_code	The currency of the payment. The default is USD.	No

TABLE 2.1 HTML Variables for Settings of Payment Page *(Continued)*

Variable	Description	Mandatory
`custom`	A free-form field for your own use. This variable is never presented to the buyer and will be returned in IPN messages.	No
`discount`	Shipping discount for this order. Specify the discount as a positive amount. Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.	No
`first_name`	First name of person the item is being shipped to.	No
`handling`	Handling charged. This amount is added to `subtotal` for the total amount.	No
`insurance`	Total shipping insurance cost for this order. Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.	
`invoice`	Order number in the merchant's ordering/invoice system.	No
`last_name`	Last name of person the item is being shipped to.	No
`lc`	The language of the login or sign-up page.	No
`night_phone_a`	The area code of the U.S. phone number, or the country code of the phone number outside the U.S. This pre-populates the buyer's home phone number.	No
`night_phone_b`	The three-digit prefix for U.S. phone numbers, or the entire non-U.S. phone number for numbers outside the U.S., excluding the country code. This pre-populates the buyer's home phone number. **NOTE:** Use this variable for non-US numbers.	No
`night_phone_c`	The four-digit phone number for U.S. phone numbers. This pre-populates the buyer's home phone number.	No
`notify_url`	The URL to which PayPal posts information about the transaction in the form of Instant Payment Notification. Be sure to enter the complete URL, including http:// or https://.	No
`partner`	ID provided to you by the authorized PayPal reseller who registered you for Payflow. If you purchased your account directly from PayPal, use PayPalUK.	Yes

TABLE 2.1 HTML Variables for Settings of Payment Page *(Continued)*

Variable	Description	Mandatory
`paymentaction`	Indicates whether the transaction is for payment on a final sale or an authorisation for a final sale (to be captured later). • **Allowable Values:** - authorization or sale • **Default Value** - sale	Yes
`return`	The URL to which the buyer's browser is redirected to after completing the payment. Be sure to enter the complete URL, including http:// or https://.	No
`shipping`	Shipping charged. This amount is added to `subtotal` for the total amount.	No
`state`	State of the shipping address.	No
`subtotal`	Amount charged for the transaction. If shipping, handling, taxes, insurance, and discount are not specified, this is the total amount charged. The value must include a decimal and the exact amount to the cent (42.00, not 42). Do not include comma separators (1234.56, not 1,234.56). You must either pass `subtotal` or `total`.	Yes
`tax`	Taxes charged. This amount is added to `subtotal` for the total amount.	No
`vendor`	Your merchant login ID that you created when you registered for the account.	Yes
`total`	Total transaction amount, including shipping, handling, taxes, insurance, and discount. The value must include a decimal and the exact amount to the cent (42.00, not 42). Do not include comma separators (1234.56, not 1,234.56).	
`zip`	Postal code of the shipping address.	No

3 Customising Your PayPal Payment Page

You can customise the look and feel of the PayPal payment page in the following two ways:

- Modifying Your PayPal Account Settings
- Adding HTML Variables

NOTE: HTML variables will override the settings you save on your profile page.

Modifying Your PayPal Account Settings

In your Service Settings section on PayPal Manager, you can change the look and feel of the payment page by modifying the settings on the following pages under the Hosted Checkout Pages section.

- Configuration
- Design

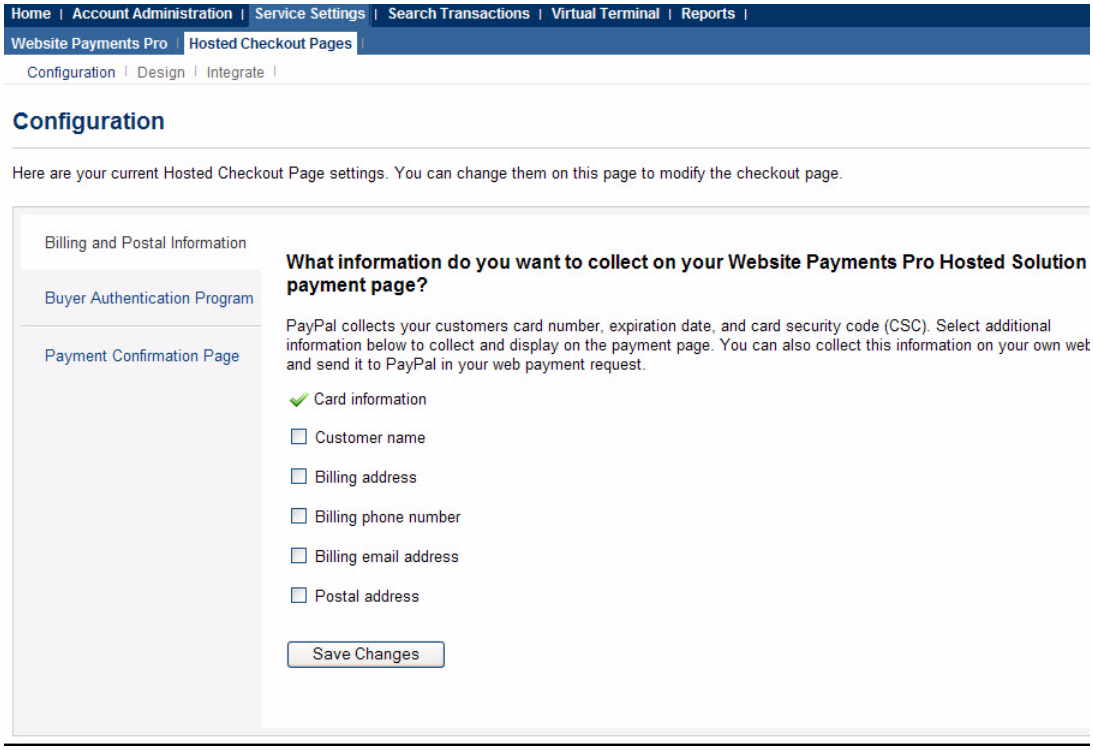
Configuration

This page allows you to select the information you want to collect and display on your payment page, verify enrollment in a buyer authentication program, and decide how you want to display the payment confirmation.

You can make these selections in the following sections:

- Billing and Postal Information
- Buyer Authentication Program
- Payment Confirmation Page

Billing and Postal Information


Home | Account Administration | Service Settings | Search Transactions | Virtual Terminal | Reports |
Website Payments Pro | Hosted Checkout Pages |
Configuration | Design | Integrate |
Configuration
Here are your current Hosted Checkout Page settings. You can change them on this page to modify the checkout page.
Billing and Postal Information
Buyer Authentication Program
Payment Confirmation Page
What information do you want to collect on your Website Payments Pro Hosted Solution payment page?
PayPal collects your customers card number, expiration date, and card security code (CSC). Select additional information below to collect and display on the payment page. You can also collect this information on your own web and send it to PayPal in your web payment request.
Card information
Customer name
Billing address
Billing phone number
Billing email address
Postal address
Save Changes

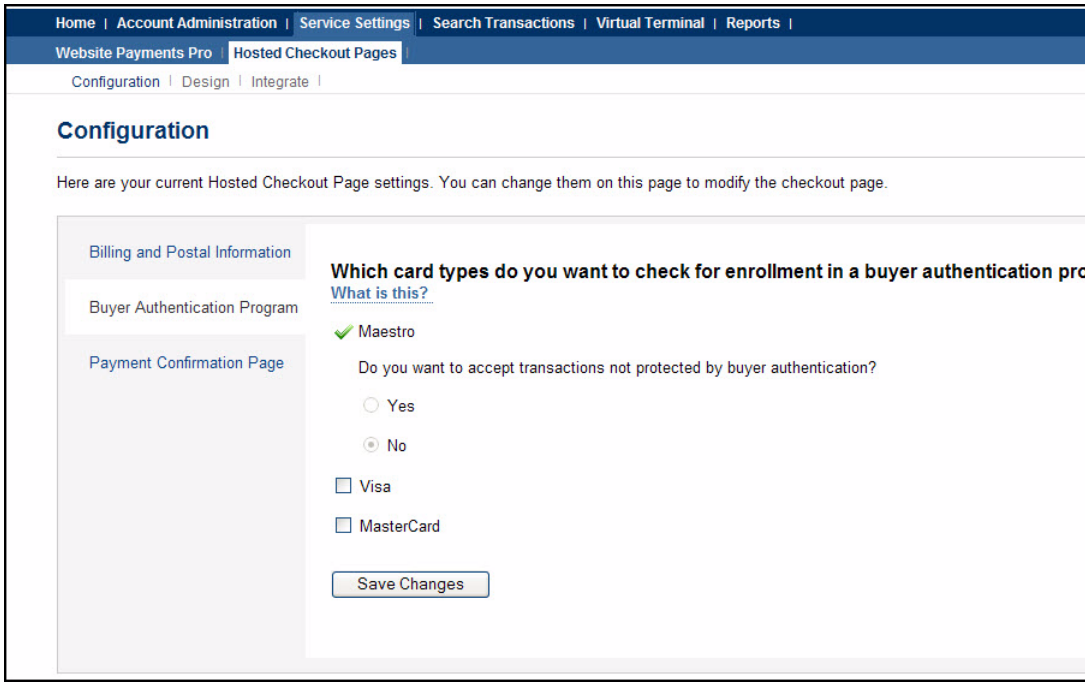
PayPal recommends that you display as few options as possible on the payment page. For example, you may have already collected shipping address on your own website in order to calculate the shipping cost and passed it on to PayPal's payment page. Therefore, it is not necessary to show this option on the payment page again.

You could have information that has already been collected on your website, but you may want to pass it to PayPal and display it on the hosted payment page again. This information will be pre-filled and editable on this page.

You can select the fields that are displayed on your hosted payment page. You have the following options:

- **Card Information** - Buyer's credit card information. This field is always displayed and selected by default.
- **Customer Name** - Buyer's first and last name
- **Billing Address** - Buyer's billing address
- **Billing Phone Number** - Buyer's phone number
- **Billing Email Address** - Buyer's email address
- **Postal Addres**s - Buyer's shipping address.

Buyer Authentication Program


Home | Account Administration | Service Settings | Search Transactions | Virtual Terminal | Reports |
Website Payments Pro | Hosted Checkout Pages |
Configuration | Design | Integrate |
Configuration
Here are your current Hosted Checkout Page settings. You can change them on this page to modify the checkout page.
Billing and Postal Information
Buyer Authentication Program
Payment Confirmation Page
Which card types do you want to check for enrollment in a buyer authentication pro
What is this?
Maestro
Do you want to accept transactions not protected by buyer authentication?
Yes
No
Visa
MasterCard
Save Changes

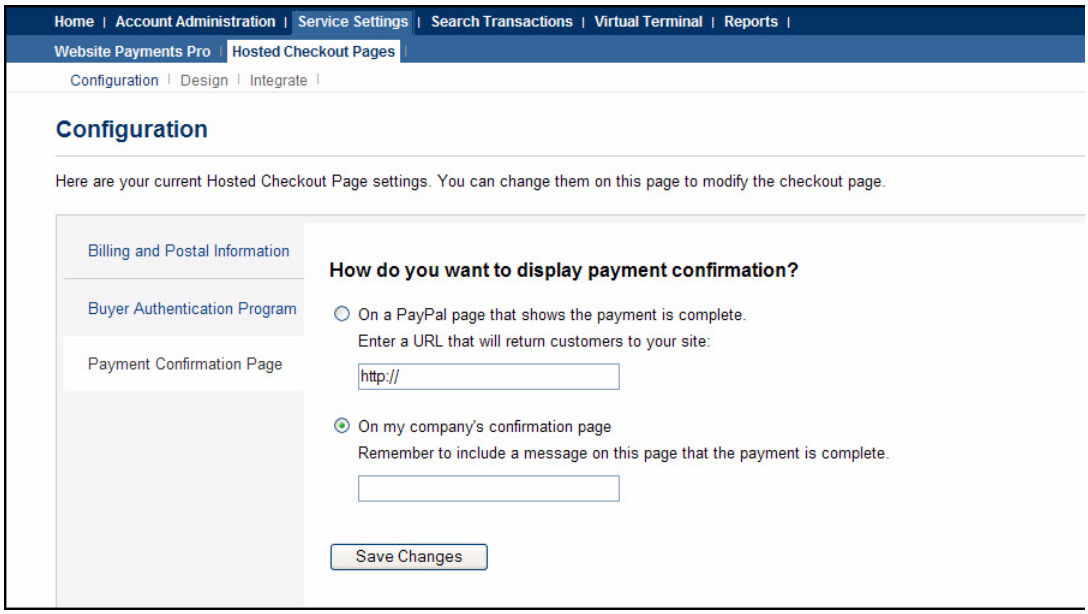
You can check Maestro, Visa, and MasterCard card types for enrollment in a buyer authentication program like 3-D Secure. 3-D Secure implementation such as Verified by Visa or MasterCard SecureCode is an additional form of authentication which provides a credit and debit card holder another layer of security while paying for online purchases. This deters the unauthorised use of the buyer's credit or debit card during online purchases and also reduces the chargeback rate for the merchants implementing this scheme.

NOTE: It is mandatory that Maestro is checked for enrollment in the buyer authentication program.

After selecting a card type to check for enrollment, you can also choose to accept transactions that are not protected by buyer authentication (transactions that do not pass the 3-D Secure check). You have the following options for such transactions:

- **Yes** - PayPal processes these transactions as non-buyer authentication transactions.
- **No** - PayPal rejects these transactions.

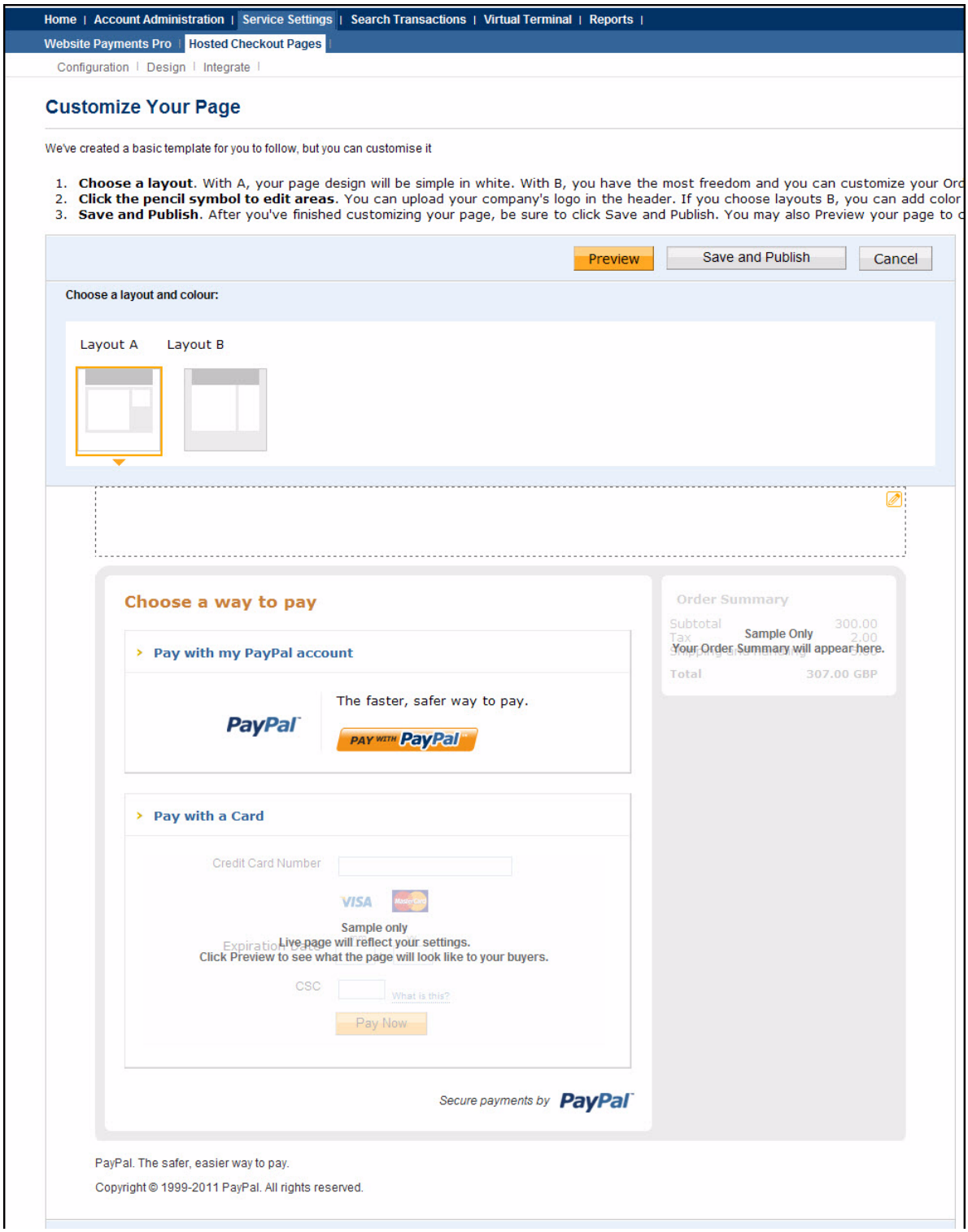
Payment Confirmation Page


Home | Account Administration | Service Settings | Search Transactions | Virtual Terminal | Reports |
Website Payments Pro | Hosted Checkout Pages |
Configuration | Design | Integrate |
Configuration
Here are your current Hosted Checkout Page settings. You can change them on this page to modify the checkout page.
Billing and Postal Information
Buyer Authentication Program
Payment Confirmation Page
How do you want to display payment confirmation?
On a PayPal page that shows the payment is complete.
Enter a URL that will return customers to your site:
http://
On my company's confirmation page
Remember to include a message on this page that the payment is complete.
Save Changes

Once the transaction is successful, you can choose to display your payment confirmation on either a PayPal's confirmation page or on your own payment confirmation page.

- **On a PayPal page that shows the payment is complete** - The payment confirmation appears on the PayPal confirmation page. Optionally, you can also provide a URL on the confirmation page to take your buyer back to your website. To do so, enter the appropriate URL in the field provided.
- **On the Company's confirmation page** - The payment confirmation will appear on your own payment confirmation page. For this, enter the URL of the page that will display the payment confirmation. You will have to message the outcome of the transaction to the buyer when PayPal redirects back to this URL. Be sure to display specifics of the order so the buyer sees a meaningful confirmation. You can get the specifics of the order using the Transaction ID we pass back to you with the return URL.

Design


Home | Account Administration | Service Settings | Search Transactions | Virtual Terminal | Reports |
Website Payments Pro | Hosted Checkout Pages |
Configuration | Design | Integrate |
Customize Your Page
We've created a basic template for you to follow, but you can customise it
1. Choose a layout. With A, your page design will be simple in white. With B, you have the most freedom and you can customize your Ord
2. Click the pencil symbol to edit areas. You can upload your company's logo in the header. If you choose layouts B, you can add color
3. Save and Publish. After you've finished customizing your page, be sure to click Save and Publish. You may also Preview your page to c
Preview
Save and Publish
Cancel
Choose a layout and colour:
Layout A
Layout B
Choose a way to pay
Pay with my PayPal account
The faster, safer way to pay.
PAY WITH PayPal
Pay with a Card
Credit Card Number
VISA
Sample only
Live page will reflect your settings.
Click Preview to see what the page will look like to your buyers.
CSC
What is this?
Pay Now
Secure payments by PayPal
Order Summary
Subtotal 300.00
Tax 2.00
Sample Only
Your Order Summary will appear here.
Total 307.00 GBP
PayPal. The safer, easier way to pay.
Copyright © 1999-2011 PayPal. All rights reserved.

This page allows you to customise your payment page. You can customise the header, background, title, button, and the order summary column of your payment page.

PayPal offers two design templates or layouts for you to choose from. Template or Layout A is the default template, however, you can choose either templates.

NOTE: Your buyers will not see the payment page until you have completed the HTML integration with your website.

Preview the design of your payment page. You can either change the design of your template, or select and customise a different template on this page. To make changes, left-click on the section you are trying to modify or the corresponding **Click to Edit** button for that section. On the pop-up that appears, click the color selector to change the color, or enter the appropriate URL, as needed.

If the buyer pays by logging into PayPal, the look and feel of that flow can be customised through the customisation options on the Profile page.

After making the changes, click one of the following buttons:

- **Preview** - Preview the changes you have made to your template before saving and publishing it.
- **Save and Publish** - Save all the changes you have made and publish the updated template. Your buyers will see the updated payment page.
- **Cancel** - Discard all the changes you have made in this session.
- **Undo Changes** - Discard all changes you have made since the last time you saved the template. Your buyers will see the last saved template.

NOTE: You must make all modifications (including changing templates) within the same session, otherwise all changes will be lost and you will have to redo your changes. If the session times out, the design of the template will remain at the version that was last published.

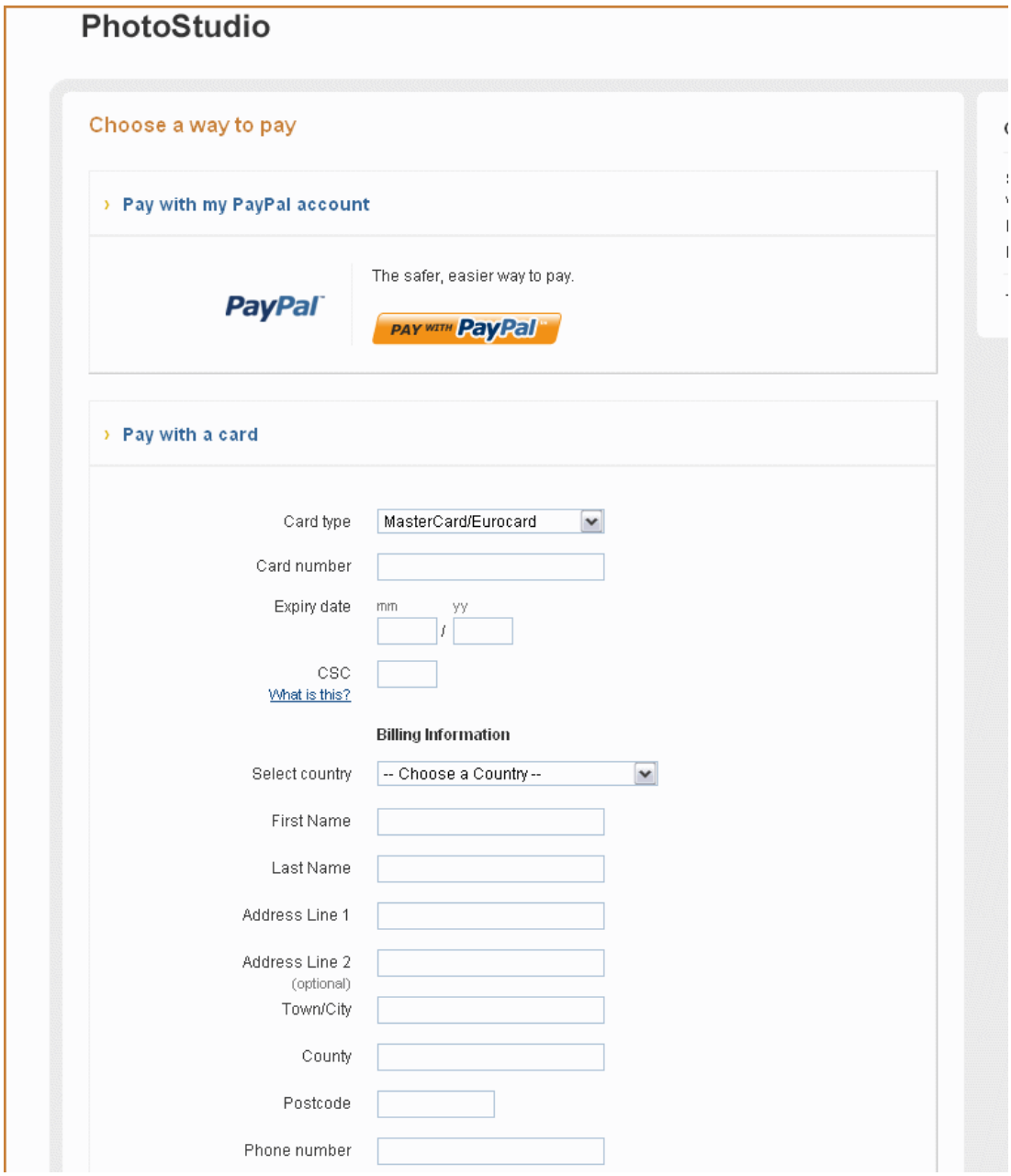
Choosing a Layout

Choose from the following two design templates or layouts:

- Template A
- Template B

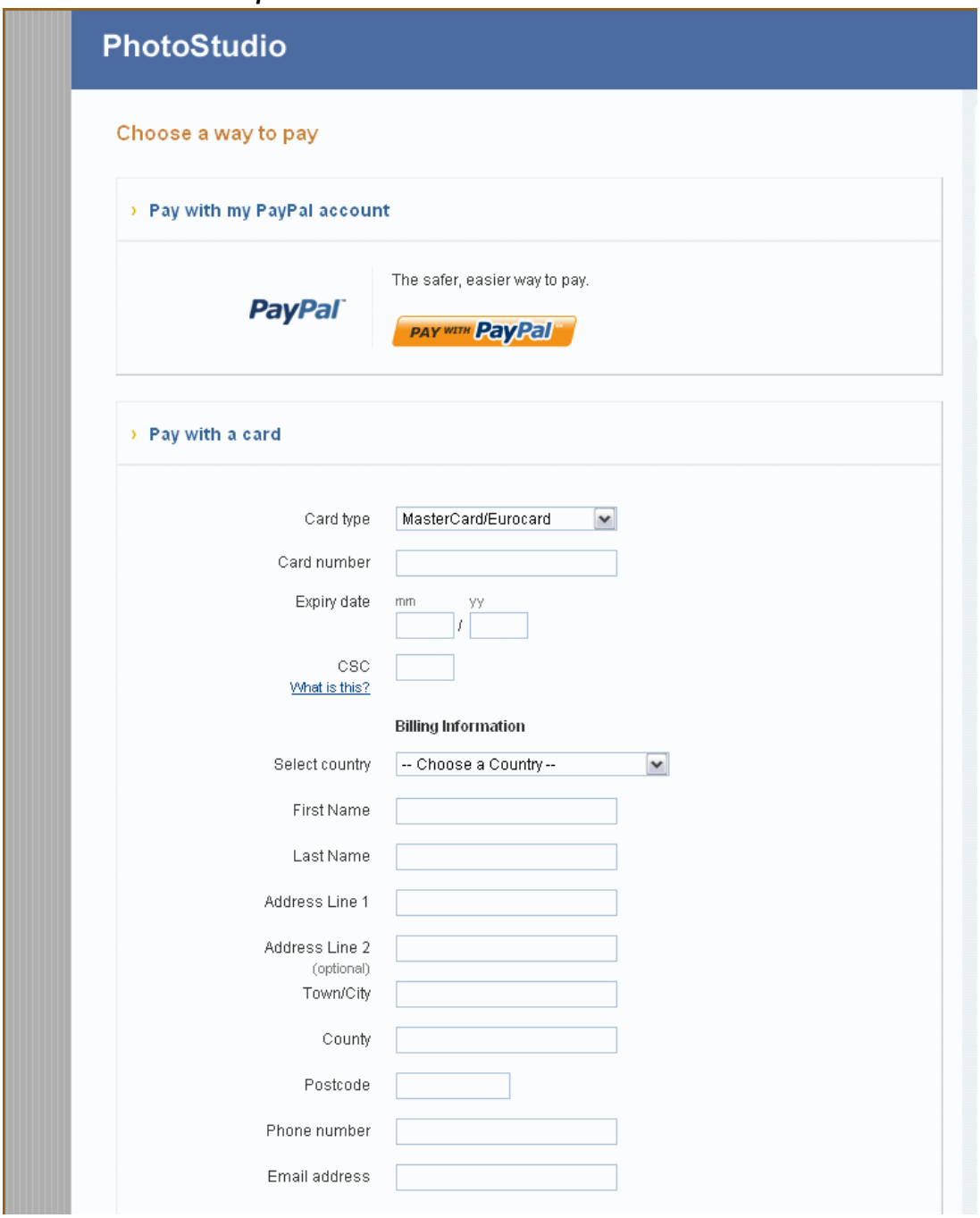
Template A. Selected by default - you can customise the header.

FIGURE 3.1 Template A



Template B. Customise the header, background, title, button, and the order summary column.

FIGURE 3.2 Template B



Customising Your Layout

Consider the following when you customise your template:

- **Header** (applicable to Template A and B) - By default, the business name from your profile is shown in the header. You can change the following:
  - Header height and color
  - Font type, size, and color
  - Swap between displaying the business name or the business logo image
  - Position of the business name or the logo

  NOTE: We recommend that you host your images on a secure server (https://) to avoid the security dialog window that may hurt conversion.
- **Background** (applicable to Template B) - You can change the following:
  - Background color
  - Background image URL
- **Title and Button** (applicable to Template B) - You can change the following:
  - Header color
  - Title bar color and title text color
  - Button color and button text color

Adding HTML Variables

The table below lists the Hosted Solution HTML variables you can use to customise the look and feel of your payment page.

TABLE 3.1 HTML Variables for Look and Feel of Payment Page

Variable	Description
`bodyBgColor`	Color of the surrounding background of the payment page.
`bodyBgImg`	Image of the surrounding background of the payment page. The file extension can be .gif, .jpg, .jpeg, or .png format.
`footerTextColor`	Color of the footer text.
`headerBgColor`	Color of the header background.
`headerHeight`	Height of the header banner. It can be from 50 to 140 pixels. The width cannot be changed. It is always 940 pixels.
`logoFont`	Font type of the logo text.
`logoFontColor`	Color of the logo text.
`logoFontSize`	Font size of the logo text.
`logoImage`	Image displayed in the logo. The acceptable file extension formats are .gif, .jpg, .jpeg, or .png. The width of the image cannot be more than 940 pixels.
`logoImagePosition`	Position of the image in the logo.
`logoText`	Business name displayed on your profile page. This field is editable and text specified here is displayed on the header if logoImage is not specified.
`orderSummaryBgColor`	Color of the Order Summary column on the right side of the payment page. You cannot change the color of the Order Summary box.
`orderSummaryBgImage`	Background image you can put in the Order Summary Column. The acceptable file extension formats are .gif, .jpg, .jpeg, or .png.
`pageButtonBgColor`	Background color of the **Pay Now** button.
`pageButtonTextColor`	Color of the **Pay Now** button. You cannot change the text of the button.
`pageTitleTextColor`	Color of the text used in the title of the page. (Text that says “Choose a way to pay.”)
`sectionBorder`	Background of the section that displays “Pay with my PayPal account” or “Pay with a Card”.

TABLE 3.1 HTML Variables for Look and Feel of Payment Page

Variable	Description
`showCustomerName`	Display customer name (first name and last name). • **Default Value**: true • **Allowable Value**: true or false, where true = show and false = hide.
`showBillingAddress`	Display billing address information. • **Default Value**: true • **Allowable Value**: true or false, where true = show and false = hide.
`showBillingPhone`	Display billing phone number. • **Default Value**: true • **Allowable Value**: true or false, where true = show and false = hide.
`showBillingEmail`	Display email address for billing purposes. • **Default Value**: false • **Allowable Value**: true or false, where true = show and false = hide.
`showHostedThankyouPage`	Display PayPal's confirmation page. • **Default Value**: true • **Allowable Value**: true or false, where true = show and false = hide.
`showShippingAddress`	Display shipping address. • **Default Value**: false • **Allowable Value**: true or false, where true = show and false = hide.
`subheaderText`	Color of the "Pay with my PayPal account" or "Pay with a Card" text.
`template`	Template used for your payment page. Options are TemplateA and TemplateB. TemplateD is used for iFrame integration only and is not an option on the Customization page on PayPal.com.

4 Integrating iFrame in Your Website

PayPal offers a compact payment form that can be integrated in an iFrame on your website. Since this form is integrated on your website, the buyer never leaves your website, thereby reducing potential drop-offs. You can also maintain your checkout look and feel in the master frame that surrounds the compact payment form. The credit card fields are part of the compact payment form so you do not have to collect this information separately. The form also supports 3-D Secure frames.

IMPORTANT: Due to security concerns involving iFrame, the following browsers are supported and secure to use - Internet Explorer 8.0, Opera 10.50, Firefox 8.0, Chrome 4.1, Safari 4.0. Transactions involving users of other browsers should not use the iFrame flow or abandon the transaction. Additionally, there is another risk beyond the iFrame flow - should the PayPal iFrame become the source of an attack, it would appear that the attack is originating from the merchant site; do not use the iFrame flow if you wish to avoid this additional risk.

NOTE: Due to spoof concerns, the form does not contain any PayPal branding.

The compact payment form contains the following fields:

- Credit card number
- Expiry date
- CVV2 number (if applicable, based on the card type)
- Any additional fields required for other card types, such as start date and issue number for Maestro or Switch.

The form also offers the following options:

- Remove the **Pay with PayPal** button. Although the form offers the option to pay using PayPal account by default, you can contact your account manager or customer support to turn this option off.
- Manually customize the color of the **Pay Now** button.

IMPORTANT: The compact payment form does not display the buyer's billing address, even if `showBillingAddress`=true is passed. However, for some merchants, it may be necessary to pass the billing address to successfully process the transactions.

Integrating iFrame

Choose one of the following methods to integrate the compact payment form in your website:

- HTML Integration
- API Integration

IMPORTANT: For optimal performance, PayPal recommends that you load the iFrame asset before other assets such as images and JavaScripts. If there are too many assets running on your payment page when you load iFrame, the request for the iFrame may not be placed or might get delayed. This may result in the buyers seeing a blank iFrame.

HTML Integration

To manually integrate the compact payment form in your website, perform the following steps:

1. Enter the iFrame tag at the location where you want the compact payment form to appear on your website. For example:

   ```
   <iframe name="hss_iframe" width="570px" height="540px"></iframe>
   ```

   The allowable size for the compact payment form is 570 pixels in width to 540 pixels in height.

2. Below is the iFrame code, add the hidden form that is populated with the appropriate Hosted Solution variables (including the total amount to be paid) and specify the variable `TemplateD`. For example,

   ```
   <form style="display:none" target="hss_iframe" name="form_iframe"
   method="post"
   action="https://securepayments.paypal.com/cgi-bin/acquiringweb">
   <input type="hidden" name="cmd" value="_hosted-payment">
   <input type="hidden" name="total" value="50.00">
   <input type="hidden" name="partner" value="PayPalUK">
   <input type="hidden" name="vendor" value="vendorname">
   <input type="hidden" name="paymentaction" value="sale">
   <input type="hidden" name="template" value="templateD">
   <input type="hidden" name="return"
   value="https://yourwebsite.com/receipt_page.html">
   </form>
   ```

3. Ensure that the target name matches the iFrame name, as highlighted in the example below:

   ```
   <iframe name="hss_iframe" width="570px" height="540px"></iframe>
   <form style="display:none" target="hss_iframe" name="form_iframe"
   method="post"
   action="https://securepayments.paypal.com/cgi-bin/acquiringweb">
   ```

4. Submit the form using JavaScript. For example:

```
<script type="text/javascript">
     document.form_iframe.submit();
</script>
```

Example of Manual Integration

The complete example as per the above steps is as follows:

```
<iframe name="hss_iframe" width="570px" height="540px"></iframe>
<form style="display:none" target="hss_iframe" name="form_iframe"
method="post"
action="https://securepayments.paypal.com/cgi-bin/acquiringweb">
<input type="hidden" name="cmd" value="_hosted-payment">
<input type="hidden" name="total" value="50.00">
<input type="hidden" name="partner" value="PayPalUK">
<input type="hidden" name="vendor" value="vendorname">
<input type="hidden" name="paymentaction" value="sale">
<input type="hidden" name="template" value="templateD">
<input type="hidden" name="return"
value="https://yourwebsite.com/receipt_page.html">
</form>
<script type="text/javascript">
     document.form_iframe.submit();
</script>
```

API Integration

To integrate the compact payment form in your website using the API, refer to “Using the Button Manager API with Hosted Solution Checkout” on page 36.

NOTE: Use template=**templateD** for this type of integration.

There are two options in the response to initiate the Hosted Solution payment flow:

- Using URL Returned in the Response
- Using Form POST

Using URL Returned in the Response

In the URL identified in the response as `EMAILLINK`, add "src" for iFrame as per the example below to redirect the buyer and initiate the payment flow.

```
<iframe src="https://www.paypal.com/...?hosted_button_id=HSS-.."
width="570px" height="540px"></iframe>
```

The allowable size of the compact payment form is 570 pixels in width to 540 pixels in height

Using Form POST

Identify the WEBSITECODE in the response and use the code to create a **Pay Now** button on your review page. When your buyer clicks the button, they are redirected to the PayPal hosted payment page. Like the URL, the button is usable for approximately two hour or until the payment is successful.

1. Enter the iFrame tag at the location where you want the compact payment form to appear on your website. For example:

   ```
   <iframe name="hss_iframe" width="570px" height="540px"></iframe>
   ```

   The allowable size for the compact payment form is 570 pixels in width to 540 pixels in height.

2. Insert the following in the iFrame tag:

   ```
   <form action="https://www.paypal.com/cgi-bin/webscr" method="post">
   <input type="hidden" name="cmd" value="_s-xclick">
   <input type="hidden" name="hosted_button_id" value="HSS-
   bXkpgPTNgZi7CyfIwWTAkWPSDbKziokU">
   <input type="image" src="https://www.paypal.com/i/btn/btn_paynow_LG.gif"
   border="0" name="submit" alt="PayPal - The safer, easier way to pay
   online.">
   <img alt="" border="0" src="https://www.paypal.com/i/scr/pixel.gif"
   width="1" height="1">
   </form>
   ```

3. Submit the form using JavaScript. For example:

   ```
   <script type="text/javascript">
        document.form_iframe.submit();
   </script>
   ```

Example of API (Form POST) Integration

The complete example as per the above steps is as follows:

```
<iframe name="hss_iframe" width="570px" height="540px"></iframe>
<form action="https://www.paypal.com/cgi-bin/webscr" method="post">
<input type="hidden" name="cmd" value="_s-xclick">
<input type="hidden" name="hosted_button_id" value="HSS-
bXkpgPTNgZi7CyfIwWTAkWPSDbKziokU">
<input type="image" src="https://www.paypal.com/i/btn/btn_paynow_LG.gif"
border="0" name="submit" alt="PayPal - The safer, easier way to pay
online.">
<img alt="" border="0" src="https://www.paypal.com/i/scr/pixel.gif"
width="1" height="1">
</form>
<script type="text/javascript">
     document.form_iframe.submit();
</script>
```

5 Integrating Your Website Using API

Using the Button Manager API, you can programmatically create the checkout button that initiates the Hosted Solution checkout flow on your website. You create the checkout button dynamically when the buyer attempts to checkout on your website. When the buyer clicks on your checkout button, you call the `BMCreateButton` API operation to create a checkout button and display it on your web page. When the buyer clicks on this checkout button, he or she is redirected to the PayPal payment page where he or she can complete the payment. You can use 3-D Secure functionality on the PayPal payment page.

HTML variables control the presentation of the PayPal payment pages, the information contained on the pages, and pages to which your buyer can be returned to when leaving the payment pages. For a list of HTML variables, refer to "HTML Variables" on page 13.

For complete information on the Button Manager API, refer to the Button Manager API (NVP) or Button Manager API (SOAP).

NOTE: Using the Button Manager API, you can programmatically create the checkout button, but not manage, edit, or delete it.

Button Hosting

For Hosted Solution, using `BUTTONTYPE=PAYMENT`, you can create the following kinds of checkout buttons:

- **Token buttons** (`BUTTONCODE=TOKEN`) are not stored on PayPal. They are dynamic and initiate the Hosted Solution checkout flow. The parameters associated with this kind of button are secure. They have a lifetime of approximately two hours, if not used.
- **Encrypted buttons** (`BUTTONCODE=ENCRYPTED`) are not stored on PayPal. The parameters associated with this kind of button are encrypted. You must update the web pages that use an encrypted button each time the button or the associated information changes.
- **Clear text buttons** (`BUTTONCODE=CLEARTEXT`) are not stored on PayPal. The parameters associated with this kind of button are not encrypted. They can be used dynamically because you can change the value of a parameter anytime. However, if you use them, recognize the risk that sensitive information can be altered or stolen.

NOTE: Hosted buttons (`BUTTONCODE=HOSTED`) are not supported for Hosted Solution and will return an error if used.

For more information about Button Manager API usage, refer to "BMCreateButton API Operation" on page 42.

Using the Button Manager API with Hosted Solution Checkout

NOTE: Before using the Button Manager API, you must acquire PayPal API credentials. For more information, refer to Appendix A, "Obtaining API Credentials.

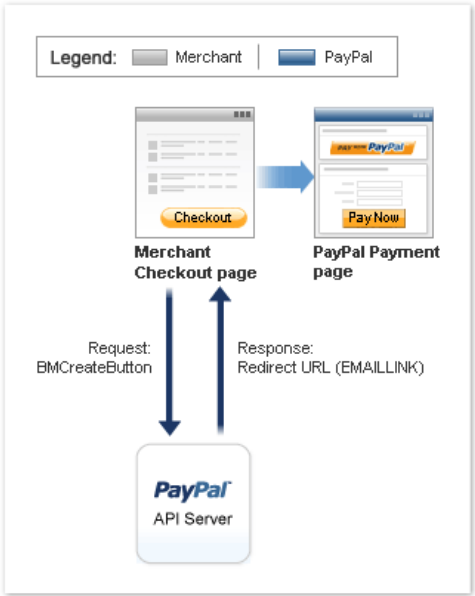
To create a checkout button on your website, you call the `BMCreateButton` API operation. When the buyer clicks on the checkout button, PayPal initiates the Hosted Solution checkout flow.

You must decode the response from the `BMCreateButton` API. For information about URL encoding, refer to the Name-Value Pair API Developer Guide.

There are two options in the response to initiate the Hosted Solution payment flow:

- Using URL Returned in the Response (Recommended)
- Using Form POST

Using URL Returned in the Response (Recommended)



Using the URL identified in the response as `EMAILLINK`, you can redirect the buyer and initiate the payment flow.

NOTE: PayPal recommends using `TOKEN` or `ENCRYPTED`.

Example of TOKEN

```
EMAILLINK=https://securepayments.paypal.com/cgi-bin/webscr?cmd=_s-
xclick&hosted_button_id=HSS-1PncRuoWdOkE2cDn3bIsTr-5ODQU-
xac&HOSTEDBUTTONID=HSS-1PncRuoWdOkE2cDn3bIsTr-5ODQU-xac&TIMESTAMP=2011-08-
17T22:58:45Z&CORRELATIONID=5366c981124b1&ACK=Success&VERSION=65.0&BUILD=206
6255
```

Example of ENCRYPTED

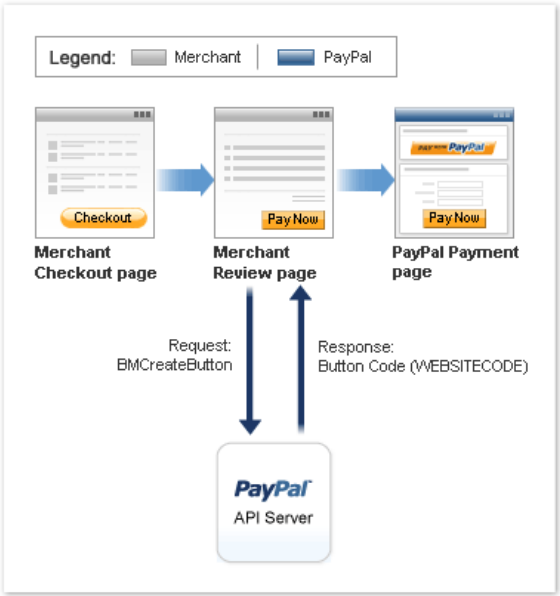
```
EMAILLINK=https://securepayments.paypal.com/acquiringweb?cmd=_hosted-
payment&currency_code=GBP&paymentaction=sale&shipping=1&tax=1&return=http%3
a%2f%2fwww%2epaypal%2ecom&partner=PayPalUK&vendor=ukpro2002&total=7&subtota
l=1&TIMESTAMP=2011-08-
17T22:59:57Z&CORRELATIONID=3b76bdaf28f3e&ACK=Success&VERSION=65.0&BUILD=206
6255
```

Example of CLEARTEXT

```
EMAILLINK=https://securepayments.paypal.com/acquiringweb?cmd=_hosted-
payment&currency_code=GBP&paymentaction=sale&shipping=1&tax=1&return=http%3
a%2f%2fwww%2epaypal%2ecom&partner=PayPalUK&vendor=ukpro2002&total=7&subtota
l=1&TIMESTAMP=2011-08-
17T23:00:57Z&CORRELATIONID=6dcc37afaa5ec&ACK=Success&VERSION=65.0&BUILD=206
6255
```

The button variables control the presentation in the flow and the information that is provided to the buyer initially. Because the URL is associated with a Hosted Solution token, the URL is usable for approximately two hours after it is created or until the payment is successful.

Using Form POST



Identify the WEBSITECODE in the response and use the code to create a **Pay Now** button on your review page. When your buyer clicks the button, they are redirected to the PayPal hosted payment page. Like the URL, the button is usable for approximately two hours or until the payment is successful.

NOTE: PayPal recommends using TOKEN or ENCRYPTED.

Example for TOKEN

```
WEBSITECODE=<form action="https://securepayments.paypal.com/cgi-bin/webscr"
method="post">
<input type="hidden" name="cmd" value="_s-xclick">
<input type="hidden" name="hosted_button_id" value="HSS-
1PncRuoWdOkE2cDn3bIsTr-5ODQU-xac">
<input type="image"
src="https://www.paypal.com/en_GB/i/btn/btn_paynow_LG.gif" border="0"
name="submit" alt="PayPal – The safer, easier way to pay online.">
<img alt="" border="0" src="https://www.paypal.com/en_GB/i/scr/pixel.gif"
width="1" height="1">
</form>
```

Example for ENCRYPTED

```
WEBSITECODE=<form action="https://securepayments.paypal.com/cgi-bin/webscr"
method="post">
<input type="hidden" name="cmd" value="_s-xclick">
<input type="hidden" name="encrypted" value="-----BEGIN PKCS7-----
MIIHkwYJKoZIhvcNAQcEoIIHhDCCB4ACAQExggE0MIIBMAIBADCBmDCBkjELMAkGA1UEBhMCVVM
xCzAJBgNVBAgTAkNBMRYwFAYDVQQHEw1Nb3VudGFpbiBWaWV3MRQwEgYDVQQKEwtQYXlQYWwgSW
5jLjEVMBMGA1UECxQMc3RhZ2UyX2NlcnRzMRMwEQYDVQQDFApzdGFnZTJfYXBpMRwwGgYJKoZIh
vcNAQkBFg1yZUBwYXlwYWwuY29tAgEAMA0GCSqGSIb3DQEBAQUABIGAsqS5KoYWmzqj2crl/I9v
a72rukNNWuxh2TBBhhx4P7DGcYeIzA82FzS3MmZTJfY2VydHMEwHwweqfs3yBjMA0GCSqGSIb3D
QEBAQUABIGAdW7vFpnU+jbGW1if7YCAsMiViJbw5HKK3TNkeJvv8pxFZetWb3HO0KWM3zzaPz1v
URBuDCQa8l4RlEb3n/zT7k2/eusAq4LbS6YEPu2od/AUTDkyDSCA32XBjS78yzpJ5KHTW4eoeff
l8pCEkrcRwfV4hyqsSgTOuvfPOBer3yA=-----END PKCS7-----
">
<input type="image"
src="https://www.paypal.com/en_GB/i/btn/btn_paynow_LG.gif" border="0"
name="submit" alt="PayPal – The safer, easier way to pay online.">
<img alt="" border="0" src="https://www.paypal.com/en_GB/i/scr/pixel.gif"
width="1" height="1">
</form>
```

Example of CLEARTEXT

```
WEBSITECODE=<form action="https://securepayments.paypal.com/acquiringweb"
method="post">
<input type="hidden" name="cmd" value="_hosted-payment">
<input type="hidden" name="currency_code" value="GBP">
<input type="hidden" name="paymentaction" value="sale">
<input type="hidden" name="return" value="http://www.yourwebsite.com">
<input type="hidden" name="partner" value="PayPalUK">
<input type="hidden" name="vendor" value="ukpro2002">
<input type="hidden" name="total" value="7">
```

```
<input type="hidden" name="subtotal" value="1">
<input type="image"
src="https://www.paypal.com/en_GB/i/btn/btn_paynow_LG.gif" border="0"
name="submit" alt="PayPal – The safer, easier way to pay online.">
<img alt="" border="0" src="https://www.paypal.com/en_GB/i/scr/pixel.gif"
width="1" height="1">
</form>
```

NOTE: The PayPal payment page displays a button identified as **Pay Now** to complete the checkout flow. The **Pay Now** button on the PayPal page is different than the **Pay Now** button created by the BMCreateButton API operation on the review page. You may need to change the URL for the latter in `BUTTONIMAGEURL` to avoid confusion.If a URL is not specified in `BUTTONIMAGEURL`, then the default **Pay Now** is used for the button.

Encrypting Buttons Using Public and Private Key

Using Encrypted Website Payments helps secure payment buttons that you generate or write manually. Encrypted Website Payments protects the HTML button code that contains pricing information by encrypting it. HTML button code that you protect by using Encrypted Website Payments cannot be altered by malicious third parties to create fraudulent payments. For detailed information, refer to Chapter 7, “Protecting Buttons by Using Encrypted Website Payments

Example of Initiating Hosted Solution Checkout

The example shows the NVP parameters using `BUTTONCODE=TOKEN` for creating a URL to initiate the Hosted Solution checkout flow. Refer to Table 5.1 for more information about the parameters in the example.

TABLE 5.1 API Credentials

Parameter	Value
`USER`	(Required) Your PayPal API Username
`PWD`	(Required) Your PayPal API Password
`VERSION`	(Required) Version number of the NVP API service, such as 80.0
`SIGNATURE`	(Optional) Your PayPal API signature string. If you use an API certificate, do not include this parameter.

```
<form method=post action=https://api-3t.paypal.com/nvp>
<input type=hidden size=40 name="USER" value=your PayPal API username>
<input type=hidden size=40 name="PWD" value=your PayPal API password>
<input type=hidden size=80 name="SIGNATURE" value=Your PayPal API
Signature>
<input type=hidden name="VERSION" value=80.0>
<input type=hidden name="BUTTONCODE" value=token>
<input type=hidden name="BUTTONTYPE" value=payment>
<input type=hidden size=40 name="L_BUTTONVAR0" value="paymentaction=sale">
<input type=hidden size=40 name="L_BUTTONVAR1" value="partner=PayPalUK">
<input type=hidden size=40 name="L_BUTTONVAR2" value="your vendor name">
<input type=hidden name="L_BUTTONVAR3" value="invoice=12345678">
<input type=hidden name="L_BUTTONVAR4" value="lc=GB">
<input type=hidden name="L_BUTTONVAR5" value="total=0.50">
<input type=hidden name="L_BUTTONVAR6" value="subtotal=0.10">
<input type=hidden name="L_BUTTONVAR7" value="shipping=0.01">
<input type=hidden name="L_BUTTONVAR8" value="handling=0.01">
<input type=hidden name="L_BUTTONVAR9" value="tax=0.01">
<input type=hidden name="L_BUTTONVAR10" value="currency_code=GBP">
<input type=hidden size=40 name="L_BUTTONVAR11" value="showCardInfo=true">
<input type=hidden size=40 name="L_BUTTONVAR12"
value="showCustomerName=true">
<input type=hidden size=40 name="L_BUTTONVAR13"
value="showBillingAddress=true">
<input type=hidden size=40 name="L_BUTTONVAR14"
value="showBillingPhone=true">
<input type=hidden size=40 name="L_BUTTONVAR15"
value="showBillingEmail=true">
<input type=hidden size=40 name="L_BUTTONVAR16"
value="showShippingAddress=true">
<input type=hidden size=40 name="L_BUTTONVAR17"
value="showHostedThankyouPage=true">
<input type=hidden size=40 name="L_BUTTONVAR18"
value="notify_url=http://your IPN URL">
<input type=hidden size=40 name="L_BUTTONVAR19" value="custom=custom
information here">
<input type=hidden size=40 name="L_BUTTONVAR20"
value="cancel_return=http://your merchant URL">
<input type=hidden size=40 name="L_BUTTONVAR21" value="return=http://your
merchant URL">
<input type=hidden name="L_BUTTONVAR22" value="first_name=Mr.">
<input type=hidden name="L_BUTTONVAR23" value="last_name=Chau">
<input type=hidden name="L_BUTTONVAR24" value="address1=Gardens">
<input type=hidden name="L_BUTTONVAR25" value="address2=99343 ba">
<input type=hidden name="L_BUTTONVAR26" value="city=Paris">
<input type=hidden name="L_BUTTONVAR27" value="state=Alsac">
<input type=hidden name="L_BUTTONVAR28" value="zip=75002">
<input type=hidden name="L_BUTTONVAR29" value="country=FR">
<input type=hidden size=40 name="L_BUTTONVAR30"
value="billing_first_name=John">
```

```
<input type=hidden size=40 name="L_BUTTONVAR31"
value="billing_last_name=Tiger">
<input type=hidden size=40 name="L_BUTTONVAR32"
value="billing_address1=5088 Craven Hill Gardens">
<input type=hidden size=40 name="L_BUTTONVAR33"
value="billing_address2=Apt# 199343 ba">
<input type=hidden size=40 name="L_BUTTONVAR34"
value="billing_city=Wolverhampton">
<input type=hidden size=40 name="L_BUTTONVAR35" value="billing_state=West
Midlands">
<input type=hidden size=40 name="L_BUTTONVAR36" value="billing_zip=W124LQ">
<input type=hidden size=40 name="L_BUTTONVAR37" value="billing_country=GB">
<input type=hidden size=40 name="L_BUTTONVAR38"
value="billing_phone=6502122200">
<input type=hidden size=40 name="L_BUTTONVAR39"
value="billing_company_name=Company name">
<input type=hidden size=40 name="L_BUTTONVAR40"
value="billing_fax=6502122200">
<input type=hidden size=40 name="L_BUTTONVAR41"
value="billing_middle_name=V">
<input type=hidden size=40 name="L_BUTTONVAR42" value="night_phone_a=408">
<input type=hidden size=40 name="L_BUTTONVAR43" value="night_phone_b=398">
<input type=hidden size=40 name="L_BUTTONVAR44" value="night_phone_c=3065">
<input type=hidden size=40 name="L_BUTTONVAR45"
value="buyer_email=john.smith@email.com">
<input type=hidden size=40 name="L_BUTTONVAR46" value="bn=GBD">
<input type=hidden size=40 name="L_BUTTONVAR47" value="cbt=your preferred
business display name">
<input type=hidden size=40 name="L_BUTTONVAR48"
value="address_override=true">
<input type=hidden size=40 name="L_BUTTONVAR49"
value="cpp_header_image=Red">
<input type=hidden size=40 name="L_BUTTONVAR50" value="logoText=PayPal">
<input type=hidden size=40 name="L_BUTTONVAR51"
value="logoImage=http://images.com/logo.gif">
<input type=hidden size=40 name="L_BUTTONVAR52"
value="logoImagePosition=center">
<input type=hidden size=40 name="L_BUTTONVAR53" value="logoFont=Arial
Bold">
<input type=hidden size=40 name="L_BUTTONVAR54" value="logoFontSize=24px">
<input type=hidden size=40 name="L_BUTTONVAR55" value="bodyBgImg=sdf">
<input type=hidden size=40 name="L_BUTTONVAR56" value="headerHeight=70px">
<input type=hidden size=40 name="L_BUTTONVAR57"
value="orderSummaryBgImage=http://images.com/ordersummary.jpg">
<input type=hidden size=40 name="L_BUTTONVAR58" value="template=templateA">
<input type=submit name=METHOD value=BMCreateButton>
</form>
```

BMCreateButton API Operation

Use the `BMCreateButton` API operation to create Hosted Solution checkout button.

- BMCreateButton Request
- BMCreateButton Response
- BMCreateButton Errors

BMCreateButton Request

The request fields specify the characteristics of your button, which include associated menu items related to the button. You can specify up to 5 menu items, each of which can include up to 10 possible selections.

BMCreateButton Request Fields

Field	Description
`METHOD`	*(Required)* BMCreateButton
`BUTTONCODE`	*(Optional)* The kind of button code to create. It is one of the following values: • `TOKEN` - A secure button, not stored on PayPal, used only to initiate the Hosted Solution checkout flow; default for **Pay Now** button. Since version 65.2 • `ENCRYPTED` - An encrypted button, not stored on PayPal • `CLEARTEXT` - An unencrypted button, not stored on PayPal
`BUTTONTYPE`	*(Required)* The kind of button you want to create. `PAYMENT` - **Pay Now** button; since version 65.2
`L_BUTTONVAR`*n*	*(Optional)* HTML standard button variables

BMCreateButton Response

The response contains an ID if the button is hosted on PayPal, and code for HTML in a website and for a link in email.

BMCreateButton Response Fields

Field	Description
`WEBSITECODE`	HTML code for web pages
`EMAILLINK`	Code for URL for the Hosted Solution checkout flow
`HOSTEDBUTTONID`	ID of a Hosted Solution token

BMCreateButton Errors

Error Code	Short Message	Long Message
10001	Internal Error	Internal Error
11923	Invalid Argument	The button image value specified is invalid.
11924	Invalid Argument	The button image URL specified is invalid.
11925	Invalid Argument	The button type specified is invalid.
11926	Invalid Data	One of the parameters specified using ButtonVar is invalid.
11937	Invalid Argument	A text box name specified is invalid. Text box names must not exceed 64 characters.
11938	Invalid Argument	The button code value specified is invalid.
11943	Invalid Argument	The button country value specified is invalid.
11945	Invalid Data	The button country and language code combination specified is invalid.
11947	Invalid Argument	The tax rate specified is invalid. Make sure any punctuation marks are in the correct places and value specified is in the range 0.0 to 100.
11948	Invalid Argument	The amount specified is invalid. Make sure any punctuation marks are in the correct places.
12210	Invalid Argument	The currency code value specified is invalid.
13117	Invalid Argument	Subtotal amount is not valid.
13118	Invalid Argument	Tax amount is not valid.
13119	Invalid Argument	Handling amount is not valid.
13120	Invalid Argument	Shipping amount is not valid.

6 Order Processing

This chapter walks you through the end to end order processing experience. It includes information about verifying the status and authenticity of the order before fulfilling it.

Verifying Transaction Status and Authenticity

When the buyer successfully completes a transaction, they are redirected either to the PayPal confirmation page or a website you specified in the `return` variable or on the Settings page in the Profile section (as outlined in "Simple Hosted Solution Integration" on page 11). When the browser is redirected to the website you specified, a Transaction ID is appended to it.

When you receive the redirect (URL with Transaction ID), you must verify that the order was completed successfully on PayPal before sending the items to the buyer. You can do so by checking the confirmation email sent to you by PayPal or by verifying the transaction history.

Validate Instant Payment Notification (IPN)

IPN enables you to receive messages about transaction payments and activity from PayPal through asynchronous, server-to-server communication. This allows you to integrate your online payments with your order fulfillment process.

Through IPN, you receive messages for the following:

- Payments and their status (pending, complete, or denied)
- Authorisations, chargebacks, disputes, reversals, and refunds.

After a transaction has been processed, PayPal sends an IPN to the notification URL specified in your transaction using the parameter `notify_url`, or in your PayPal Profile. You must verify that the Transaction ID, transaction amount, and other order specific parameters such as Invoice ID that are sent in the IPN match with the information you have in your order processing system. For more details, refer to Instant Payment Notification Guide.

Fulfilling Order

After you have verified the authenticity of the payment amount and status, you can fulfil the order by shipping the item to the buyer.

A Obtaining API Credentials

To use the PayPal APIs, you must have API credentials that identify you as a PayPal account holder who is authorized to perform various API operations. Although you can use either an API *signature* or a *certificate*, PayPal recommends you use a signature.

IMPORTANT: Although you have both a signature and a certificate, you cannot use both at the same time.

Creating an API Signature

An API consists of an API username along with an associated API password and signature, all of which are assigned by PayPal. You need to include this information whenever you execute a PayPal API operation.

You must have a PayPal account to create a signature.

To create an API signature:

1. Log in to PayPal, then click **Profile** under **My Account**.
2. Under **Account Information**, click **Request API Credentials**.
3. Under **Option 1 - PayPal API**, click **Set up PayPal API credentials and permissions**.
4. Under **Option 2**, click **View API Signature**.
5. Save the information and click **Done** to complete the process.

Creating an API Certificate

Create an API certificate only if your website requires it. Typically, you want to create an API signature for your credentials instead.

You must have a PayPal account to create an API certificate.

NOTE: The certificate for API credentials is not the same as an SSL certificate for your website; they are not related to each other.

If you do need a certificate, follow these instructions:

1. Log in to PayPal, then click **Profile** under **My Account**.
2. Under **Account Information**, click **Request API Credentials**.
3. Under **Option 1 - PayPal API**, click **Set up PayPal API credentials and permissions**.

4. Under **Option 2**, click **View API Signature**.
5. Save the values for API Username and API Password, and click **Done**.
6. Click **Download Certificate** and save the file.
7. Rename the file to something familiar, such as `paypal_live_cert.pem`. It is not necessary to keep the `.txt` file extension. Be sure to remember where you save the file.

After completing this task:

- If you use the PayPal SDK for Java, the PayPal SDK for .NET, or the PayPal SDK for Classic ASP, you must encrypt your certificate in PCKS12 format.
- If you use the PayPal SDK for .NET or Classic ASP, you must take additional steps to import the certificate.

Encrypting Your Certificate Into PKCS12 Format

PayPal SDKs for Java, .NET, and Classic ASP require the additional task of encrypting your certificate into PKCS12 format. Perform this task for both your Sandbox certificate and your live certificate.

NOTE: This task is not required if you are using the PayPal SDK for PHP.

The certificate you download from PayPal is in PEM format. It contains both your public certificate and the associated private key. Although the PEM certificate is not human readable, the file is not encrypted.

The steps in this task require you to use the OpenSSL encryption tool. On Unix, this tool is typically installed for you. On Windows, you typically must download OpenSSL yourself; in this case, accept the defaults when you install OpenSSL and add OpenSSL to the path.

NOTE: In Windows, the Path is a System environment variable, which is accessible from the **Advanced** tab when you right-click on your **My Computer** icon and view its properties. Do not confuse the **System variables** path with with the **User variables** path. Add OpenSSL to the **System variables** path.

To encrypt your certificate into PKCS12 format:

1. Use OpenSSL to create the PKCS12-format certificate from the downloaded PEM-format certificate.

   `openssl pkcs12 -export -in` *download*`.txt -inkey` *download*`.txt -out` *certificate*`.p12`

2. At the prompt, enter an Export Password for the certificate.
3. Save your Export Password.

Importing Your Certificate

For either PayPal SDK for .NET or Classic ASP, you must download and execute the Windows HTTP Services Certificate Configuration Tool, `WinHTTPCertCfg`. If you use the .NET platform and develop with the PayPal SDK for .NET, you need to take a few more steps before your certificate can be used.

You must use `WinHTTPCertCfg` to import the certificate into the Windows Certificate Store and grant access to your private key to the user executing your web application. This is a Windows requirement, not a PayPal requirement. You can download `WinHTTPCertCfg` from the Microsoft Windows Server 2003 Resource Kit Tools page. For Microsoft documentation, see WinHttpCertCfg.exe, a Certificate Configuration Tool.

To import a certificate:

1. Execute `WinHTTPCertCfg` to import the certificate into the Windows Certificate Store and grant access to your private key to the party executing your web application.

   `WinHttpCertCfg -i` *certificate*`.p12 -p` *privateKeyPassword* `-c`

   where *certificate* is your PKCS12 certificate and *privateKeyPassword* is your Export Password.

2. Using `WinHTTPCertCfg`, change the *username* in `LOCAL_MACHINE\My -a` *username* to one of the following values:

TABLE A.1

Configuration	Username value
`ASP. NET`	`ASPNET`
Windows IIS 5 default configuration	`IWAM`_machineName, where *machineName* is the computer name
Windows IIS 6 default configuration	“`NETWORK SERVICE`” (You must include the quote marks.)

B Error Messages

The table below lists error codes and the appropriate correction action.

TABLE B.1 Error Codes and the Corresponding Corrective Actions

Error Code	Error Message	Corrective Action (if applicable)
1	User authentication failed.	Error is caused by one or more of the following: Login information is incorrect. Verify that USER, VENDOR, PARTNER, and PASSWORD have been entered correctly. VENDOR is your merchant ID and USER is the same as VENDOR unless you created a Payflow Pro user. All fields are case sensitive. Invalid Processor information entered. Contact merchant bank to verify. "Allowed IP Address" security feature implemented. The transaction is coming from an unknown IP address. See PayPal Manager online help for details on how to use Manager to update the allowed IP addresses. You are using a test (not active) account to submit a transaction to the live PayPal servers. Change the host address from the test server URL to the live server URL.
2	Invalid tender type.	Your merchant bank account does not support the following credit card type that was submitted.
3	Invalid transaction type.	
4	Invalid amount format.	Transaction type is not appropriate for this transaction. For example, you cannot credit an authorization-only transaction.
5	Invalid merchant information.	Processor does not recognize your merchant account information. Contact your bank account acquirer to resolve this problem.
6	Invalid or unsupported currency code	Use valid currency code.
7	Field format error.	Invalid information entered. See RESPMSG.
8	Not a transaction server	
9	Too many parameters or invalid stream	
10	Too many line items	

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
11	Client time-out waiting for response	
12	Declined	Check the credit card number, expiration date, and transaction information to make sure they were entered correctly. If this does not resolve the problem, have the customer call their card issuing bank to resolve.
13	Referral.	Transaction cannot be approved electronically but can be approved with a verbal authorization. Contact your merchant bank to obtain an authorization and submit a manual Voice Authorization transaction.
14	Invalid Client Certification ID.	Check the HTTP header. If the tag, X-VPS-VIT-CLIENT-CERTIFICATION-ID, is missing, RESULT code 14 is returned.
19	Original transaction ID not found.	The transaction ID you entered for this transaction is not valid. See RESPMSG.
20	Cannot find the customer reference number	
22	Invalid ABA number	
23	Invalid account number.	Check credit card number and re-submit.
24	Invalid expiration date.	Check and re-submit.
25	Invalid Host Mapping.	Error is caused by one or more of the following: You are trying to process a tender type such as Discover Card, but you are not set up with your merchant bank to accept this card type. You are trying to process an Express Checkout transaction when your account is not set up to do so. Contact your account holder to have Express Checkout added to your account.
26	Invalid vendor account.	Login information is incorrect. Verify that USER, VENDOR, PARTNER, and PASSWORD have been entered correctly. VENDOR is your merchant ID and USER is the same as VENDOR unless you created a Payflow Pro user. All fields are case sensitive.
27	Insufficient partner permissions	
28	Insufficient user permissions	
29	Invalid XML document.	This could be caused by an unrecognized XML tag or a bad XML format that cannot be parsed by the system.
30	Duplicate transaction	

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
31	Error in adding the recurring profile	
32	Error in modifying the recurring profile	
33	Error in canceling the recurring profile	
34	Error in forcing the recurring profile	
35	Error in reactivating the recurring profile	
36	OLTP Transaction failed	
37	Invalid recurring profile ID	
50	Insufficient funds available in account	
51	Exceeds per transaction limit	
99	General error.	See RESPMSG.
100	Transaction type not supported by host	
101	Time-out value too small	
102	Processor not available	
103	Error reading response from host	
104	Timeout waiting for processor response.	Try your transaction again.
105	Credit error.	Make sure you have not already credited this transaction, or that this transaction ID is for a creditable transaction. (For example, you cannot credit an authorization.)
106	Host not available	
107	Duplicate suppression time-out	

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
108	Void error.	See RESPMSG. Make sure the transaction ID entered has not already been voided. If not, then look at the Transaction Detail screen for this transaction to see if it has settled. (The Batch field is set to a number greater than zero if the transaction has been settled). If the transaction has already settled, your only recourse is a reversal (credit a payment or submit a payment for a credit).
109	Time-out waiting for host response	
110	Referenced auth (against order) Error	
111	Capture error.	Either an attempt to capture a transaction that is not an authorization transaction type, or an attempt to capture an authorization transaction that has already been captured.
112	Failed AVS check.	Address and ZIP code do not match. An authorization may still exist on the cardholder's account.
113	Merchant sale total will exceed the sales cap with current transaction. ACH transactions only.	
114	Card Security Code (CSC) Mismatch. An authorization may still exist on the cardholder's account.	
115	System busy, try again later	
116	VPS Internal error. Failed to lock terminal number	
117	Failed merchant rule check.	One or more of the following three failures occurred: An attempt was made to submit a transaction that failed to meet the security settings specified on the PayPal Manager *Security Settings* page. If the transaction exceeded the Maximum Amount security setting, then no values are returned for AVS or CSC. AVS validation failed. The AVS return value should appear in the RESPMSG. CSC validation failed. The CSC return value should appear in the RESPMSG.
118	Invalid keywords found in string fields	

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
119	General failure within PIM Adapter	
120	Attempt to reference a failed transaction	
121	Not enabled for feature	
122	Merchant sale total will exceed the credit cap with current transaction. ACH transactions only.	
125	Fraud Protection Services Filter — Declined by filters	
126	Fraud Protection Services Filter — Flagged for review by filters Result code 126 indicates that a transaction triggered a fraud filter. This is not an error, but a notice that the transaction is in a review status. The transaction has been authorized but requires you to review and to manually accept the transaction before it will be allowed to settle.	Result code 126 is intended to give you an idea of the kind of transaction that is considered suspicious to enable you to evaluate whether you can benefit from using the Fraud Protection Services. To eliminate result 126, turn the filters off. For more information, see the Fraud Protection Services documentation for your payments solution. It is available on the PayPal Manager Documentation page.
127	Fraud Protection Services Filter — Not processed by filters	
128	Fraud Protection Services Filter — Declined by merchant after being flagged for review by filters	
131	Version 1 Payflow Pro SDK client no longer supported.	Upgrade to the most recent version of the Payflow Pro client.
132	Card has not been submitted for update	
133	Data mismatch in HTTP retry request	
150	Issuing bank timed out	
151	Issuing bank unavailable	

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
200	Reauth error	
201	Order error	
402	PIM Adapter Unavailable	
403	PIM Adapter stream error	
404	PIM Adapter Timeout	
600	Cybercash Batch Error	
601	Cybercash Query Error	
1000	Generic host error.	This is a generic message returned by your credit card processor. The RESPMSG will contain more information describing the error.
1001	Buyer Authentication Service unavailable	
1002	Buyer Authentication Service — Transaction timeout	
1003	Buyer Authentication Service — Invalid client version	
1004	Buyer Authentication Service — Invalid timeout value	
1011	Buyer Authentication Service unavailable	
1012	Buyer Authentication Service unavailable	
1013	Buyer Authentication Service unavailable	
1014	Buyer Authentication Service — Merchant is not enrolled for Buyer Authentication Service (3-D Secure).	
1016	Buyer Authentication Service — 3-D Secure error response received.	Instead of receiving a PARes response to a Validate Authentication transaction, an error response was received.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
1017	Buyer Authentication Service — 3-D Secure error response is invalid.	An error response is received and the response is not well formed for a Validate Authentication transaction.
1021	Buyer Authentication Service — Invalid card type	
1022	Buyer Authentication Service — Invalid or missing currency code	
1023	Buyer Authentication Service — merchant status for 3D secure is invalid	
1041	Buyer Authentication Service — Validate Authentication failed: missing or invalid PARES	
1042	Buyer Authentication Service — Validate Authentication failed: PARES format is invalid	
1043	Buyer Authentication Service — Validate Authentication failed: Cannot find successful Verify Enrollment	
1044	Buyer Authentication Service — Validate Authentication failed: Signature validation failed for PARES	
1045	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid amount in PARES	
1046	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid acquirer in PARES	

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
1047	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid Merchant ID in PARES	
1048	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid card number in PARES	
1049	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid currency code in PARES	
1050	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid XID in PARES	
1051	Buyer Authentication Service — Validate Authentication failed: Mismatched or invalid order date in PARES	
1052	Buyer Authentication Service — Validate Authentication failed: This PARES was already validated for a previous Validate Authentication transaction	
10001	Your payment can't be processed right now. Please try again later.	Try again later.
10004	Your payment can't be processed. Please contact the merchant directly with this code.	There is a problem with your integration. Check the parameters that you have supplied.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10009	Your payment can't be processed. Please contact the merchant directly with this code.	Try again later.
10010	Your payment can't be processed. Please contact the merchant directly with this code.	Provide a valid invoice ID.
10413	Your payment can't be processed. Please contact the merchant directly with this code.	Subtotal, shipping, handling, and tax. Review the totals in your integration.
10500	Your payment can't be processed. Please contact the merchant directly with this code.	You have not agreed to the billing agreement.
10501	Your payment can't be processed. Please contact the merchant directly with this code.	Billing agreement is disabled or inactive.
10502	Your credit card has expired. Please pay with a valid card.	Credit card used has expired.
10504	Please enter a valid card security code.	CVV provided is invalid. The CVV is between 3-4 digits long.
10505	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was refused because the AVS response returned the value of N, and the merchant account is not able to accept such transactions.
10507	Your payment can't be processed. Please contact the merchant directly with this code.	Your PayPal account is restricted. Contact PayPal with this error code.
10508	Please enter a valid card expiration date.	Expiration date must be in the correct format.
10509	Your payment can't be processed. Please contact the merchant directly with this code.	PayPal was unable to determine the IP address of the buyer.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10511	Your payment can't be processed. Please contact the merchant directly with this code.	Review the integration to ensure that a valid PaymentAction value is supplied.
10512	Please enter a first name.	First name of the buyer is required.
10513	Please enter a last name.	Last name of the buyer is required.
10520	Your payment can't be processed. Please contact the merchant directly with this code.	Amounts supplied do not match.
10523	Your payment can't be processed right now. Please try again later.	Try again later.
10525	Please enter a valid amount.	Verify your integration to ensure that the amounts are not zero.
10527	Please enter a valid card number.	Credit card entered is invalid.
10534	Your payment can't be processed. Please contact the merchant directly with this code.	Credit card entered is currently restricted by PayPal. Contact PayPal with this error code.
10535	Please enter a valid credit card number.	Credit card entered is invalid.
10536	Your payment can't be processed. Please contact the merchant directly with this code.	All shopping cart items must be in the same currency.
10537	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined by the country filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.
10538	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined by the maximum amount filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.
10539	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined by fraud filter managed by the merchant. To accept this translation, change your risk settings on PayPal.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10540	Please enter a valid address.	Transaction was declined by PayPal because of an invalid address. Buyer should provide the correct address.
10541	Please enter a valid credit card number.	Credit card entered is currently restricted by PayPal. Contact PayPal with this error code.
10542	Please enter a valid email address.	Email address is in an invalid format. Buyer should provide the email address in the correct format.
10544	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined by PayPal. Contact PayPal with this error code.
10545	Your payment can’t be processed. Please pay with another credit card.	Transaction was declined by PayPal because of possible fraudulent activity. Contact PayPal with this error code.
10546	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined by PayPal because of possible fraudulent activity on the IP address. Contact PayPal with this error code.
10547	Your payment can't be processed. Please contact the merchant directly with this code.	None - this is a PayPal internal error.
10548	Your payment can't be processed. Please contact the merchant directly with this code.	Merchant account attempting the transaction is not a business account at PayPal. Check your account settings.
10549	Your payment can't be processed. Please contact the merchant directly with this code.	Merchant account attempting the transaction is not able to process Direct Payment transactions. Contact PayPal with this error code.
10550	Your payment can't be processed. Please contact the merchant directly with this code.	Access to Direct Payment was disabled for your account. Contact PayPal with this error code.
10552	Your payment can't be processed. Please contact the merchant directly with this code.	Merchant account attempting the transaction does not have a confirmed email address with PayPal. Check your account settings.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10553	Your payment can't be processed. Please contact the merchant directly with this code.	Merchant attempted a transaction where the amount exceeded the upper limit for that merchant.
10554	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined because of a risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a no match (AVS = N).
10555	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined because of a risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a partial match.
10556	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined because of a risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS was unsupported.
10557	Your payment can't be processed. Please contact the merchant directly with this code.	Check your payment receiving preferences. Contact PayPal if you more help.
10558	Your payment can't be processed. Please contact the merchant directly with this code.	Credit card supplied cannot be charged in the currency requested.
10560	Please enter a valid card issue number.	Buyer should enter a valid card number.
10561	Please enter a complete billing address.	Buyer should enter the complete billing address.
10562	Please enter a valid year for the credit card expiration date.	Buyer should enter a valid year for card expiration.
10563	Please enter a valid month for the credit card expiration date.	Buyer should enter a valid month for card expiration.
10564	Your payment can't be processed. Please contact the merchant directly with this code.	A duplicate transaction was detected, advice buyer to try again later.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10565	Your payment can't be processed. Please contact the merchant directly with this code.	Merchant country is not supported.
10566	Your payment can't be processed. Please pay with a different card type.	Credit card type is not supported.
10567	Please enter an issue number or a start date.	Buyer should enter an issue number or a start date.
10570	Your payment can’t be processed. Please pay with another credit card.	Credit card supplied doesn’t support “Authorization”.
10701	Please enter a valid name for the billing address.	Buyer should enter a valid name in the billing address.
10702	Please enter a valid address in line 1 of the billing address.	Buyer should enter a valid address in line 1 of the billing address.
10703	Please enter a valid address in line 2 of the billing address.	Buyer should enter a valid address in line 2 of the billing address.
10704	Please enter a valid city in the billing address.	Buyer should enter a valid city in the billing address.
10705	Please enter a valid state in the billing address.	Buyer should enter a valid state in the billing address.
10706	Please enter a valid ZIP code in the billing address.	Buyer should enter a valid zip code in the billing address.
10707	Please enter a valid country in the billing address.	Buyer should enter a valid country in the billing address.
10708	Please enter a complete billing address.	Buyer should enter the complete billing address.
10709	Please enter an address in line 1 of the billing address.	Buyer should enter an address in line 1 of the billing address.
10710	Please enter a city in the billing address.	Buyer should enter a city in the billing address.
10711	Please enter a state in the billing address.	Buyer should enter a state in the billing address.
10712	Please enter a valid postal code in the billing address.	Buyer should enter a valid zip code in the billing address.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10713	Please enter a country in the billing address.	Buyer should enter a country in the billing address.
10714	Please enter a valid name in the billing address.	Buyer should enter a valid name in the billing address.
10715	Please enter a valid state in the billing address.	Buyer should enter a valid state in the billing address.
10716	Please enter a valid postal code in the billing address.	Buyer should enter a valid zip code in the billing address.
10717	Please enter a valid postal code in the billing address.	Buyer should enter a valid zip code in the billing address.
10718	Please enter a valid city in the billing address.	Buyer should enter a valid city.
10719	Please enter a valid addressee name in the shipping address.	Buyer should enter a valid addressee name for shipping address.
10720	Please enter a valid address in line 1 of the shipping address.	Buyer should enter a valid address in line 1 of the shipping address.
10721	Please enter a valid address in line 2 of the shipping address.	Buyer should enter a valid address in line 2 of the shipping address.
10722	Please enter a valid city in the shipping address.	Buyer should enter a valid city in the shipping address.
10723	Please enter a valid state in the shipping address.	Buyer should enter a valid state in the shipping address.
10724	Please enter a valid postal code in the shipping address.	Buyer should enter a valid postal code in the shipping address.
10725	Please enter a valid country in the shipping address.	Buyer should enter a valid country in the shipping address.
10726	Please enter a complete shipping address.	Buyer should enter a complete shipping address.
10727	Please enter an address in line 1 of the shipping address.	Buyer should enter an address1 in the shipping address.
10728	Please enter a city in the shipping address.	Buyer should enter a city in the shipping address.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10729	Please enter a state in the shipping address.	Buyer should enter a state in the shipping address.
10730	Please enter a postal code in the shipping address.	Buyer should enter a valid postal code in the shipping address.
10731	Please enter a country in the shipping address.	Buyer should enter a country in the shipping address.
10732	Please enter a valid addressee name in the shipping address.	Buyer should enter a valid addressee in the shipping address.
10733	Please enter a valid state in the shipping address.	Buyer should enter a valid state in the shipping address.
10734	Please enter a valid postal code in the shipping address.	Buyer should enter a valid postal code in the shipping address.
10735	Please enter a valid postal code in the shipping address.	Buyer should enter a valid postal code in the shipping address.
10736	Please enter a valid city and state in the shipping address.	Buyer should enter a valid city and state in the shipping address.
10744	Please enter a valid country in the billing address.	Buyer should enter a valid country in the billing address.
10745	Please enter a valid country in the shipping address.	Buyer should enter a valid country in the shipping address.
10746	Your payment can't be processed. Please contact the merchant directly with this code.	Credit card from this country is not supported.
10747	Your payment can't be processed. Please contact the merchant directly with this code.	Contact PayPal with this error code.
10748	Please enter a card security code.	Buyer should enter a Card Security Code.
10750	Please enter a valid state in the shipping address.	Buyer should enter a valid state in the shipping address.
10751	Please enter a valid state in the billing address.	Buyer should enter a valid state in the billing address.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
10752	Your payment can't be processed. Please pay with another card.	Transaction was declined by the issuing bank, not PayPal. Buyer should attempt another card.
10754	Your payment can't be processed. Please pay with another card.	Buyer should use a different credit card.
10755	Your payment can't be processed. Please contact the merchant directly with this code.	Review your integration to ensure that the currency code is supported.
10756	Your payment can't be processed. Please pay with another card.	Buyer should use a different credit card.
10759	Your payment can't be processed. Please pay with another card.	Transaction was declined by PayPal. Contact PayPal with this error code.
10761	Your payment can't be processed because this transaction appears to be a duplicate of a recent transaction.	Transaction was declined because PayPal is currently processing a transaction by the same buyer for the same amount. This error can occur when a buyer submits multiple, identical transactions in quick succession.
10762	Your payment can't be processed. Please pay with another card.	Excessive CVV failures on the credit card. Buyer should try a different card.
10763	Your payment can't be processed. Please contact the merchant directly with this code.	None - this is a PayPal internal error.
10764	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined by PayPal. Contact PayPal with this error code.
11611	Your payment can't be processed. Please contact the merchant directly with this code.	Check your Fraud Management Filters.
11998	Please enter the date when your credit card became valid.	Buyer should give the correct start date for their credit card.

TABLE B.1 Error Codes and the Corresponding Corrective Actions *(Continued)*

Error Code	Error Message	Corrective Action (if applicable)
12000	Your payment can't be processed. Please contact the merchant directly with this code.	This is related to insufficient 3DS parameters. Contact PayPal with this error code.
12001	Your payment can't be processed. Please contact the merchant directly with this code.	This is related to insufficient 3DS parameters. Contact PayPal with this error code.
15001	Your payment can't be processed. Please pay with another card.	Transaction was rejected by PayPal because of excessive failures over a short period of time for this credit card. Contact PayPal with this error code.
15002	Your payment can't be processed. Please pay with another card.	Transaction was declined by PayPal. Contact PayPal with this error code.
15003	Your payment can't be processed. Please contact the merchant directly with this code.	Transaction was declined because the merchant does not have a valid commercial entity agreement on file with PayPal. Contact PayPal with this error code.
15004	Please enter a valid Card Security Code.	Transaction was declined because the CVV entered does not match the credit card.
15005	Your payment can't be processed. Please pay with another card.	Transaction was declined by the issuing bank, not PayPal. Buyer should attempt another card.
15006	Please enter a valid card number.	Transaction was declined by the issuing bank, not PayPal. Buyer should attempt another card.
15007	Your card is expired. Please pay with a valid card.	Transaction was declined by the issuing bank because of an expired credit card. Buyer should attempt another card.
15008	Your payment can't be processed. Please contact the merchant directly with this code.	Review your integration to ensure that the totals match.
15009	Your payment can't be processed. Please contact the merchant directly with this code.	There is a mismatch in the currency code. Contact PayPal with this error code.
99998	Your payment can't be processed. Please contact the merchant directly with this code.	Credit card data is invalid. Contact PayPal with this error code.

C Currency Codes

The table below lists all the currencies supported by PayPal.

TABLE C.1 Currency Codes

Currency Code	Country Name
AUD	Australian Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
CZK	Czech Koruna
DKK	Danish Krone
EUR	Euro
GBP	British Pound Sterling
HKD	Hong Kong Dollar
HUF	Hungarian Forint
JPY	Japanese Yen
NOK	Norwegian Krone
NZD	New Zealand Dollar
PLN	Polish Zloty
SEK	Swedish Krona
SGD	Singapore Dollar
USD	U.S. Dollar

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